

REMARKS

Applicants have carefully reviewed the Application in light of the Office Action dated March 4, 2004. Claims 1-3, 5-7, 11-53, 55-57, and 61-132 are pending and stand rejected. For the reasons provided below, Applicants submit that the pending claims are patentably distinguishable over the cited reference. Therefore, Applicants respectfully request reconsideration and favorable action in this case.

Section 103 Rejections

The Office Action has rejected Claims 1-3, 5-7, 11-53, 55-57, and 61-132 under 35 U.S.C. § 103(a) as being unpatentable over various combinations of the following art: WO 99/48310 to *Puuskari*, WO 99/05828 to *Forslow*, U.S. Patent 6,587,457 B1 to *Mikkonen*, U.S. Patent 6,356,759 B1 to *Mustajarvi*, "Quasi-Static Resource Allocation with Interference Avoidance for Fixed Wireless Systems" by *Chawla, et al.*, U.S. Patent 6,021,309 to *Sherman, et al.*, U.S. Patent 5,987,326 to *Tiedemann, Jr., et al.*, U.S. Patent 5,926,458 to *Yin*, "Service Scheduling for General Packet Radio Service Classes" to *Pang, et al.*, and "Quality of service management functions in 3rd generation mobile telecommunication networks" to *Kalliokulju*. Applicants respectfully traverse all rejections and assertions therein.

The Examiner has not met his burden of establishing a *prima facie* case of obviousness in making these rejections. According to M.P.E.P. §2143, to establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some suggestion or motivation to combine the references. Second, there must be a reasonable expectation of success. Third, the prior art combination of references must teach or suggest all the claim limitations. As described below, the Examiner has failed to satisfy at least one of these elements of non-obviousness, which are required to support a proper §103 analysis.

The Examiner has not shown how the proposed combination teaches each and every limitation of the claimed invention. For example, Independent Claim 1 recites, "determining for each packet based on the included flow identifier a location for a corresponding flow, the location comprising a physical location of a mobile device in the wireless network." For the teaching of determining a physical location of a mobile device, the Examiner offers an IP address associated with the application as disclosed in *Forslow*. More specifically, The Examiner states, "inherently or indirectly the flow identifier also acts as a "physical location" of a mobile device in the wireless network." Such an "indirect or inherent" link between an IP address and a physical location is not explained in the Office Action and is not sufficient to

meet the requirements of 35 U.S.C. § 103. Applicants submit that the offered IP address does not identify the physical location of a mobile device in a wireless network. *Forslow* merely discloses that a mobile host may have multiple IP addresses such that each IP address identifies a different application running on the mobile host. Page 9, Lines 1-16. At most, a given IP address as disclosed in *Forslow* identifies a mobile host, not its physical location within a wireless network.

Independent Claim 1 also recites, "assigning each packet to one of a plurality of virtual groups based on the location for the corresponding flow, the virtual groups comprising discrete transmission resources." For the teaching of assigning a packet to a virtual group, the Examiner offers the following passage from *Forslow*: "As a result, plural application flows may be flexibly established during the mobile host session having different network layer (e.g., IP) addresses and different qualities of service." The Examiner appears to be asserting that a Quality of Service (QoS) associated with a flow from an application as disclosed in *Forslow* is equivalent to the claimed virtual group. The offered QoS, as is well known in the art, are merely parameters associated with a flow that determine treatment of the flow during transmission. It is not a virtual group of "discrete transmission resources." The Applicants offers examples of such discrete resources on Page 21, Lines 18-23 of the application that include a meter, controller, and queue. Even assuming that the IP address can be construed as identifying a physical location and the QoS can be construed as virtual groups, *Forslow* merely teaches that the QoS is based on the data type of the flow, not the physical location of the mobile device in the wireless network. Page 6, Lines 25-28.

Independent Claims 51 and 128 are allowable for reasons analogous to those provided above. Claims 2-3, 5-7, and 11-50 each depend from independent Claim 1 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 1. Claims 52-53, 55-57, and 61-127 each depend from independent Claim 51 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 51. Claims 129-130 each depend from independent Claim 128 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 128. Applicants respectfully request reconsideration and allowance of these claims.

Additionally, Independent Claim 101 recites, "generating dynamic congestion control parameters for a wireless traffic queue based on a status of the wireless network, the status

comprising either network loading or performance information." For the teaching of this limitation, the Examiner offers the RSVP parameters disclosed in *Forslow*. To begin with, the offered RSVP parameters merely request a QoS and are thus not dynamic congestion control parameters. *Forslow*, Page 20, Lines 13-14. Furthermore, *Forslow* merely discloses that it is determined whether the network can meet the RSVP parameters given the status of the network, not that the RSVP parameters are generated **based on** a status of the network. In particular, RSVP parameters, FLOWSPEC and FILTERSPEC, are passed to the SGSN via the GGSN and the SGSN determines if there is sufficient capacity in the network to meet the RSVP parameters. *Forslow*, Page 20, Lines 13-14. Therefore, *Forslow* merely teaches determining whether the capacity of a network can meet RSVP parameters, not generating parameters much less congestion control parameters based on the status of the network. Accordingly, Applicants respectfully request the removal of the 35 U.S.C. § 103(a) rejection of Claim 101.

Independent Claims 111 and 131 are allowable for analogous reasons. Claims 102-110 each depend from independent Claim 101 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 101. Claims 112-119 each depend from independent Claim 111 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 111. Claims 132 depends from independent Claim 131 and is thus patentable over the cited art for at least the reasons discussed above with regard to Claim 131. Applicants respectfully request reconsideration and allowance of these claims.

Independent Claim 120 recites, "queuing a packet for a corresponding flow to a first location in a wireless network in a first queue associated with the first location." For the teaching of this limitation, the Examiner offers the queues illustrated in FIGURE 11 of *Forslow*. However, the offered queues merely illustrate that each base station cell includes a queues for mobility management signaling and quality of service. *Forslow*, Page 21, Lines 10-12. However, there is simply no disclosure of queuing a packet in a flow in a queue that is associated with the location to which the flow is destined. Accordingly, Applicants respectfully request the removal of the 35 U.S.C. § 103(a) rejection of Claim 120.

Independent Claim 123 is allowable for analogous reasons. Claims 124-127 each depend from independent Claims 123 and are thus patentable over the cited art for at least the reasons discussed above with regard to Claim 123. Applicants respectfully request reconsideration and allowance of these claims.

CONCLUSION

Applicants have made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicants respectfully request full allowance of all the pending claims.

If the present application is not allowed and/or if one or more of the rejections is maintained, Applicants hereby request a telephone conference with the Examiner and further request that the Examiner contact the undersigned attorney to schedule the telephone conference.

Although Applicants believe no fees are due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicants



Brian W. Oaks
Reg. No. 44,981

Date: June 4, 2004

Correspondence Address
2001 Ross Avenue
Dallas, Texas 75201-2980
Tel. 214.953.6986